

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-3, 6-11, and 13-16 are pending in the present application, Claims 1, 7, and 13 having been amended, and Claims 14-16 having been added. Support for the amendments to Claims 1, 7, and 13 is found, for example, in Figs. 5, 8, and 9 (and their corresponding description in the specification). Support for new Claims 14-16 is found, for example, in Figs. 10, 11A, and 11B. Applicants respectfully submit that no new matter is added.

In the outstanding Office Action, Claims 1-3, 6, 7, 10, and 13 were rejected under 35 U.S.C. §103(a) as anticipated by Watanabe (U.S. Patent No. 5,589,954) in view of DeLean (U.S. Patent No. 6,301,025); Claim 8 was rejected under 35 U.S.C. §103(a) as unpatentable over Watanabe in view of DeLean, and further in view of Aoyagi (U.S. Patent No. 5,982,999); Claim 9 was rejected under 35 U.S.C. §103(a) as unpatentable over Watanabe in view of DeLean, and further in view of Tabata et al. (U.S. Patent No. 6,993,181, hereinafter Tabata); and Claim 11 is rejected under 35 U.S.C. §103(a) as unpatentable over Watanabe in view of DeLean, and further in view of Bhattacharjya et al. (U.S. Patent No. 6,546,132, hereinafter Bhattacharjya).

With respect to the rejection of Claim 1 as unpatentable over Watanabe and DeLean, Applicants respectfully submit that the amendment to Claim 1 overcomes this ground of rejection. Amended Claim 1 recites, *inter alia*, “a determining unit configured to determine image characteristics of areas in an image data corresponding to an image, said determining unit includes an edge separation unit configured to detect a character edge from the image data, a halftone detecting unit configured to determine whether a target pixel is halftone or non-halftone, and a color determining unit configured to determine whether the target pixel is chromatic or achromatic, and said determining unit is configured to generate area data

corresponding to each of the areas based at least in part on the character edge detected by the edge separation unit” Watanabe and DeLean, taken alone or in proper combination, do not disclose or suggest at least these elements of amended Claim 1.

In a non-limiting embodiment of the invention defined by Claim 1, before converting a file into a general format, a copying machine (having scanning and transmitting functions, can process image data so that the image data can preferably amend and convert the image data that includes characters and non-character images. The non-limiting embodiment can avoid degradation of image quality, can transmit image data efficiently, and can optimize the faculties of image data transition.

The outstanding Office Action relies on Watanabe to describe the claimed “determining unit.” The outstanding Office Action appears to equate the claimed “determining unit” to area separating portion 112 of Watanabe. The area separating portion 112 judges whether the area of the manuscript document from the output signal a of the reading-out apparatus 111 is a photograph area or a net-point (dotted) area. The area separating portion 112 employs a method of well-known (image) area separating (segmentation) treatment, for instance, in Electronic Information/Communication Academic Magazine (Gakkai-shi) IE90-32.¹ Watanabe does not disclose or suggest that area separating portion 112 includes an edge separation unit configured to detect a character edge from the image data, and the area separating portion 112 does not generate area data corresponding to each of the areas based at least in part on the character edge detected by the edge separation unit.

Watanabe does not disclose or suggest a determining unit that includes a halftone detecting unit and a color determining unit.

¹ Watanabe, col. 37, lines 57-64.

DeLean does not cure the above-noted deficiencies in Watanabe. DeLean describes converting pixels from one color space to another color space, and does not disclose or suggest the claimed “a determining unit configured to determine image characteristics of areas in an image data corresponding to an image, said determining unit includes an edge separation unit configured to detect a character edge from the image data, a halftone detecting unit configured to determine whether a target pixel is halftone or non-halftone, and a color determining unit configured to determine whether the target pixel is chromatic or achromatic, and said determining unit is configured to generate area data corresponding to each of the areas based at least in part on the character edge detected by the edge separation unit”

Applicants respectfully submit that a person of ordinary skill in the art could not properly combine Watanabe and DeLean to arrive at the claimed invention because neither Watanabe nor DeLean disclose or suggest the claimed “said determining unit including an edge separation unit configured to detect a character edge from the image data, and said determining unit is configured to generate area data corresponding to each of the areas based at least in part on the character edge detected by the edge separation unit.”

In view of the above-noted distinctions, Applicants respectfully submit that amended Claim 1 (and any claims dependent thereon) patentably distinguishes over Watanabe and DeLean taken alone or in proper combination. Claims 7 and 13 recite elements similar to those of amended Claim 1. Applicants respectfully submit that Claims 7 and 13 (and any claims dependent thereon) patentably distinguish over Watanabe and DeLean, taken alone or in proper combination, for at least the reasons stated for Claim 1.

Addressing each of the further rejections, each of the further rejections is also traversed by the present response as no teachings in any of the further cited references to Aoyagi, Bhattacharjya, and Tabata can overcome the above-noted deficiencies of Watanabe

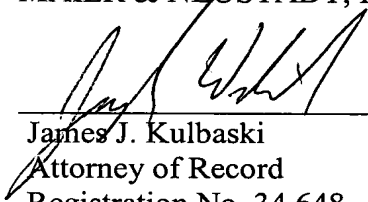
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and DeLean. Accordingly, it is respectfully requested that those rejections be withdrawn for similar reasons as discussed above.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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